GENERAL CHEMICAL

SODIUM NITRITE Revised: 05/16/2013

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MATERIAL SAFETY DATA SHEET

GENERAL CHEMICAL

NFPA:

2

0

HMIS:

PPE:

SYMBOL(S): REGULATED

OXIDIZER, CLASS/DIVISION 5.1

CLASS 6.1, TOXIC

CURRENT ISSUE DATE: MAY 16, 2013

REVISION NUMBER: 0

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SODIUM NITRITE

OTHER/GENERIC NAMES:

NITROUS ACID, SODIUM SALT, SODIUM NITRITE (VARIOUS GRADES)

RECOMMENDED USE: FOOD PRESERVATION, DYE MANUFACTURING, CORROSION INHIBITOR

MANUFACTURER:

GENERAL CHEMICAL, LLC

90 EAST HALSEY ROAD

PARSIPPANY, NJ 07054

GENERAL CHEMICAL PERFORMANCE PRODUCTS LTD.

90 EAST HALSEY ROAD

PARSIPPANY, NJ 07054

FOR MORE INFORMATION:

CUSTOMER SERVICE US ONLY: 800-631-8050 (MONDAY - FRIDAY 9:00AM - 4:30PM)
CUSTOMER SERVICE CANADA ONLY: 866-543-3896 (MONDAY - FRIDAY 9:00AM - 4:30PM)

EMERGENCY TELEPHONE NUMBER:

US ONLY - CALL CHEMTREC: 800-424-9300 (24 HOURS/DAY, 7 DAYS/WEEK)
CANADA ONLY - CALL CANUTEC: 613-996-6666 (24 HOURS/DAY, 7 DAYS/WEEK)

OUTSIDE THE US: 703-527-3887

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

WHITE TO SLIGHTLY YELLOW CRYSTALLINE SOLID. TOXIC IF SWALLOWED OR DUST IS INHALED.

OXIDIZER:

MAY IGNITE ORGANIC MATERIALS AND REACT WITH OTHER MATERIALS. CAN DECOMPOSE IF MIXED WITH ACIDS OR EXPOSED TO FIRE CONDITIONS, RELEASING TOXIC NITROGEN OXIDES.

OSHA STATUS:

THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

POTENTIAL HEALTH AFFECTS:

SKIN: MAY CAUSE SKIN IRRITATION.

EYES: MAY STRONGLY IRRITATE OR BURN THE EYES.

INHALATION: PRODUCT MISTS MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT.

INGESTION:

MAY IRRITATE THE GASTROINTESTINAL TRACT. ALTHOUGH SMALL QUANTITIES ARE USED IN FOOD PREPARATION, SWALLOWING MODERATE AMOUNTS OF SODIUM NITRITE CAN RESULT IN SERIOUS TOXIC EFFECTS INCLUDING DEATH. EFFECTS INCLUDE NAUSEA, WEAKNESS, CYANOSIS (BLUE SKIN), COLLAPSE AND COMA, POSSIBLY LEADING TO DEATH. SODIUM NITRITE INTERFERES WITH THE BLOOD'S ABILITY TO TRANSPORT OXYGEN.

DELAYED EFFECTS:

NONE KNOWN. IF SODIUM NITRITE IS USED WITH AMINES FOUND IN CERTAIN CUTTING FLUIDS, POTENTIALLY CARCINOGENIC NITROSAMINE COMPOUNDS MAY BE FORMED.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT

CAS NO

WEIGHT %

SODIUM NITRITE

7632-00-0

>98%

4. FIRST AID MEASURES

EYE CONTACT:

IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN CONTACT:

FLUSH WITH PLENTY OF WATER, REMOVING CONTAMINATED CLOTHING. IF IRRITATION DEVELOPS, GET MEDICAL ATTENTION.

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET PROMPT MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING. IMMEDIATELY GIVE LARGE QUANTITIES OF WATER. GET MEDICAL ATTENTION IMMEDIATELY.

NOTES TO PHYSICIAN:

SODIUM NITRITE FORMS METHEMOGLOBIN IN THE BLOOD STREAM. TREAT ACCORDINGLY.

5. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: NOT FLAMMABLE

FLASH POINT METHOD: NOT APPLICABLE

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

UPPER FLAME LIMIT (VOLUME % IN AIR): NOT APPLICABLE LOWER FLAME LIMIT (VOLUME % IN AIR): NOT APPLICABLE

FLAME PROPAGATION RATE (SOLIDS): NOT APPLICABLE

OSHA FLAMMABILITY CLASS: NOT APPLICABLE

SUITABLE EXTINGUISHING MEDIA: USE FLOODING AMOUNTS OF WATER OR OTHER AGENTS.

UNSUITABLE EXTINGUISHING MEDIA:

DO NOT USE DRY CHEMICALS CONTAINING AMMONIUM PHOSPHATE.

EXPLOSION LIMITS:

HAZARDOUS COMBUSTION PRODUCTS: NO INFORMATION AVAILABLE

IMPACT SENSITIVITY: NO INFORMATION AVAILABLE

SENSITIVITY TO STATIC DISCHARGE: NO INFORMATION AVAILABLE

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

MATERIAL DOES NOT BURN BUT IS AN OXIDIZING AGENT AND WILL SUPPORT COMBUSTION OF OTHER MATERIALS. PRODUCT DECOMPOSES ABOVE 608 DEG. F RELEASING TOXIC NITROGEN OXIDES.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: WEAR SELF-CONTAINED BREATHING APPARATUS (SCBA) AND FULL PROTECTIVE EQUIPMENT.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE:
REMOVE SOURCES OF IGNITION. VENTILATE AREA. USE NON-SPARKING TOOLS AND
EQUIPMENT. SWEEP OR SHOVEL SPILLED MATERIAL INTO CONTAINERS. DISPOSE OF
MATERIAL ACCORDING TO LOCAL, STATE AND FEDERAL AUTHORITIES. DO NOT ALLOW

PRODUCT OR RESIDUES TO ENTER WATERWAYS AND/OR ANY SOURCE OF DRINKING WATER.

7. HANDLING AND STORAGE

HANDLING:

AVOID CONTACT WITH SKIN AND EYES. DO NOT BREATHE PRODUCT DUSTS. AVOID CONTACT WITH INCOMPATIBLE, COMBUSTIBLE, ORGANIC OR READILY OXIDIZABLE MATERIALS.

STORAGE:

STORE IN A COOL, DRY, WELL-VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED. DO NOT STORE ON WOODEN FLOORS. ISOLATE FROM COMBUSTIBLE MATERIALS. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUES; OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT

ACGIH TLV OSHA PEL ONTARIO TWAEV MEXICO OEL NIOSH IDLH

(TWA)

SODIUM NITRITE

TWA: 2 MG/M3

ENGINEERING MEASURES:

USE LOCAL EXHAUST TO KEEP AIRBORNE CONCENTRATIONS BELOW THE PERMISSIBLE EXPOSURE LIMITS.

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION:

WEAR CHEMICAL SAFETY GOGGLES. DO NOT WEAR CONTACT LENSES.

SKIN PROTECTION:

WEAR APPROPRIATE PERSONAL PROTECTIVE CLOTHING TO PREVENT SKIN CONTACT. IF PROLONGED OR REPEATED CONTACT IS ANTICIPATED, ALL CLOTHING SHOULD BE IMPERVIOUS TO LIQUID.

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA 1910.134 AND ANSI Z88.2 OR APPLICABLE FEDERAL/PROVINCIAL REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT RESPIRATOR USE. NIOSH'S "RESPIRATOR DECISION LOGIC" MAY BE USEFUL IN DETERMINING THE SUITABILITY OF VARIOUS TYPES OF RESPIRATORS.

GENERAL HYGIENE CONSIDERATIONS:

TO IDENTIFY ADDITIONAL PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS, IT IS RECOMMENDED THAT A HAZARD ASSESSMENT IN ACCORDANCE WITH THE OSHA PPE STANDARD (29 CFR 1910.132) BE CONDUCTED BEFORE USING THIS PRODUCT. EYEWASH AND SAFETY SHOWERS ARE RECOMMENDED.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: CRYSTALS

COLOR: WHITE TO SLIGHTLY YELLOW

CHEMICAL FORMULA: NaNO2

ODOR: NONE

ODOR THRESHOLD: NO INFORMATION AVAILABLE

PHYSICAL STATE: SOLID

PH: APPROX. 9.0 (FOR AQUEOUS SOLUTION)

FLASH POINT: NOT FLAMMABLE

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

BOILING POINT/RANGE: DECOMPOSES ABOVE 608 DEG. F

MELTING POINT/RANGE: 520 DEG. F

FLAMMABILITY LIMITS IN AIR: NO INFORMATION AVAILABLE

EXPLOSIVE PROPERTIES: NO INFORMATION AVAILABLE

OXIDIZING PROPERTIES: NO INFORMATION AVAILABLE

EVAPORATION RATE: NOT DETERMINED

VAPOR PRESSURE: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

SPECIFIC GRAVITY: 2.17

PARTITION COEFFICIENT (N-OCTANO/WATER): NO INFORMATION AVAILABLE

VISCOSITY: NO INFORMATION AVAILABLE

MOLECULAR WEIGHT: 69.0

WATER SOLUBILITY: 80.8 G/100 G AT 68 DEG. F

VOC CONTENT (%): 0

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: NORMALLY STABLE.

CONDITIONS TO AVOID:

MATERIAL SLOWLY OXIDIZES TO SODIUM NITRATE WHEN EXPOSED TO AIR. AVOID HEAT, FLAME, IGNITION SOURCES, SHOCK, FRICTION AND INCOMPATIBILITIES.

INCOMPATIBLE PRODUCTS:

HAZARDOUS REACTIONS CAN OCCUR WITH ACIDS, AMMONIUM COMPOUNDS, REDUCING AGENTS (PARTICULARLY CYANIDES, THIOCYANATES AND THIOSULFATES). MAY IGNITE ORGANIC COMPOUNDS AND OTHER COMBUSTIBLE MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF NITROGEN (TOXIC AND IRRITATING)

POSSIBILITY OF HAZARDOUS REACTIONS: WILL NOT OCCUR.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

COMPONENT INFORMATION:

COMPONENT

LD50 ORAL

LD50 DERMAL

LC50 INHALATION

SODIUM NITRITE

88 MG/KG (RAT)

5. 5 MG/M3/4HR (RAT)

IRRITATION: NO INFORMATION AVAILABLE

CORROSIVITY: NO INFORMATION AVAILABLE

SENSITIZATION: NO INFORMATION AVAILABLE

CHRONIC TOXICITY:

CARCINOGENICITY: THERE ARE NO KNOWN CARCINOGENIC CHEMICALS IN THIS PRODUCT.

MUTAGENIC EFFECTS: NO INFORMATION AVAILABLE

REPRODUCTIVE EFFECTS: NO INFORMATION AVAILABLE

DEVELOPMENTAL EFFECTS: NO INFORMATION AVAILABLE

TERATOGENICTY:

MULTIPLE REPRODUCTIVE TESTS INDICATE THAT SODIUM NITRITE IS NOT TERATOGENIC.

TARGET ORGAN EFFECTS: NO INFORMATION AVAILABLE

OTHER ADVERSE EFFECTS:

FETAL TOXICITY HAS BEEN DEMONSTRATED IN PREGNANT ANIMALS FED TOXIC DOSES

OF SODIUM NITRITE. THIS IS DUE TO THE FORMATION OF METHEMOGLOBIN.

ENDOCRINE DISRUPTOR INFORMATION: NO INFORMATION AVAILABLE

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

CONTAINS NO SUBSTANCES KNOWN TO BE HAZARDOUS TO THE ENVIRONMENT OR NOT DEGRADABLE IN WASTE WATER TREATMENT PLANTS.

COMPONENT

FRESHWATER ALGAE FRESHWATER FISH MICROTEX WATER FLEA

SODIUM NITRITE

LC50: 0.19 MG/L ONCORHYNCHUS MYKISS

96 H

PERSISTENCE AND DEGRADABILITY: NO INFORMATION AVAILABLE

BIOACCUMULATION: NO INFORMATION AVAILABLE

MOBILITY IN ENVIRONMENTAL MEDIA: NO INFORMATION AVAILABLE

COMPONENT LOG POW SODIUM NITRITE

-3.7

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS:

DISPOSE OF WASTE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL

REGULATIONS.

CONTAMINATED PACKAGING:

EMPTY CONTAINERS SHOULD BE TAKEN FOR LOCAL RECYCLING, RECOVERY OR WASTE

DISPOSAL.

14. TRANSPORT INFORMATION

DOT: REGULATED

PROPER SHIPPING NAME: SODIUM NITRITE

HAZARD CLASS: 5.1

SUBSIDIARY HAZARD CLASS: 6.1

UN-NO: UN1500

PACKING GROUP: PGIII

TDG: REGULATED HAZARD CLASS: 5.1

SUBSIDIARY HAZARD CLASS: 6.1

UN-NO: UN1500

PACKING GROUP: PGIII

IMDG: PRODUCT IS A MARINE POLLUTANT IF SHIPPED OVERSEAS

15. REGULATORY INFORMATION

INTERNATIONAL INVENTORIES:

TSCA: YES
DSL: YES
ELINCS: NO
EINECS: YES
ENCS: YES
CHINA: YES
KECL: YES
PICCS: YES
AICS: YES

U.S. FEDERAL REGULATIONS:

SARA 313:

SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA). THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS WHICH ARE SUBJECT TO THE REPORTING REQUIREMENTS OF THE ACT AND TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PART 372:

COMPONENT

CAS-NO

WEIGHT %

SARA 13 - THRESHOLD VALUES

SODIUM NITRITE

7632-00-0

>98

1.0

SARA 311/312 HAZARDOUS CATEGORIZATION:

CHRONIC HEALTH HAZARD: NO ACUTE HEALTH HAZARD: YES

FIRE HAZARD: NO

SUDDEN RELEASE OF PRESSURE HAZARD: NO

REACTIVE HAZARD: YES

CLEAN WATER ACT:

COMPONENT

CWA - REPORTABLE CWA - TOXIC CWA - PRIORITY CWA - HAZARDOUS

QUANTITIES

POLLUTANTS POLLUTANTS SUBSTANCES

SODIUM

100 LB

X

NITRITE

CERCLA:

COMPONENT

CERCLA RQ (LB)

SARA TPQ (LB)

SODIUM NITRITE

100 LB

U.S. STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

THIS PRODUCT DOES NOT CONTAIN ANY PROPOSITION 65 CHEMICALS.

STATE RIGHT-TO-KNOW:

COMPONENT

MASSACHUSETTS NEW

PENNSYLVANIA ILLINOIS RHODE ISLAND

JERSEY

X

SODIUM NITRITE X

X

OTHER INTERNATIONAL REGULATIONS:

MEXICO: NO INFORMATION AVAILABLE

CANADA:

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

WHMIS HAZARD CLASS: C: OXIDIZING MATERIALS

DIB: TOXIC MATERIAL D2B: TOXIC MATERIALS

16. OTHER INFORMATION

CURRENT ISSUE DATE: MAY 16, 2013

PREVIOUS ISSUE DATE: NOVEMBER 26, 2012

REVISION SUMMARY: CHANGE TO SECTION 1

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